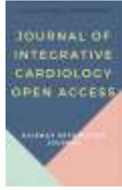

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Short Report

An Audit on "Atrial Fibrillation & Anti-Coagulation" at University Hospitals of North Midlands NHS Trust (2015-2017)

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ARTICLE INFO

Article history:
Received: 30 July, 2020
Accepted: 17 October, 2020
Published: 10 November, 2020

Keywords:
Atrial fibrillation
anti-coagulation
documentation
patient safety

ABSTRACT

Background: During hospital admission, it was noticed that most patients with atrial fibrillation (new or old) diagnosis have no clear documented plan about anticoagulation. It was considered a significant risk for patient safety.

Aim: To determine whether patients with atrial fibrillation diagnosis were on anticoagulation or not, if not have the reasons been documented in the medical notes. If new-onset atrial fibrillation whether CHADS-VASC and HASBLED scores have been used or not for anticoagulation purpose.

Settings: County Hospital Stafford & Royal Stoke University Hospital (UHNM 2015-2017).

Materials and Methods: Prospective audit, a total of 100 patient's data (50 patients per cycle) were analysed by using specific audit Performa based upon NICE Atrial Fibrillation 2014 Guidelines [1].

Statistical Analysis: Data was coded, entered in an excel spreadsheet and analysed by translating into percentages and proportions.

Results: Initial audit showed that out of 50 patients with atrial fibrillation diagnosis, 30 were already on anticoagulation and 20 were not on anticoagulation. Only 2 out of 20 were assessed for anticoagulation and 18 were not assessed. AF Performa was introduced in the clerking sheet post initial audit. Re-audit after 6 months showed 43 out of 50 patients were on anticoagulation and 7 were not. Out of these 7 patients, 3 patients had absolute contraindications (Subdural Haematoma, Rectal bleeding and major haematoma), 2 patients were assessed for anticoagulation however were not followed up and 2 were not assessed. Results comparison is explained in (Table 1).

Conclusions: This audit has demonstrated significant improvement in overall anticoagulation rates in suitable patients which have helped in improving patient safety.

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Introduction

Clinical audit is a cyclical activity that includes setting standards of practice, comparing actual practice with the standards, changing practice that does not meet the standards set and looking again at actual practice [2]. Even where clinicians have the necessary knowledge and skills, receive feedback on performance, have clear procedures and adequate resources, and are motivated to change, the practice may not change because of a lack of, or inadequate, systems [3].

Atrial fibrillation (AF) is the most common cardiac arrhythmia: It affects around 1 million people in the UK. Men are more commonly affected than women and the prevalence of AF increases with age. It has been estimated that 7,000 strokes could be avoided and 2,100 lives saved each year in England with appropriate AF management.

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http://dx.doi.org/10.31487/j.JICOA.2020.05.10

Table 1: Audit results: comparison table.

Audit Oct to Dec 2015	Re-audit Aug to Oct 2016
50 patients • Males 34 • Females 16	50 patients • Males 23 • Females 27
• Patients on Anticoagulation (AC) -30/50 (60%) • On warfarin -18 • On NOAC -12	• Patients on Anticoagulation (AC) - 43/50 (86%) • On Warfarin -17 • On NOAC -25 • Therapeutic LMWH -1 • 4 patients with new onset AF were initiated on anticoagulation in current admission
Patients not on anticoagulation -20/50 (40%)	Patients not on anticoagulation -7/50 (14%)
All were new onset AF CHADVASC>3	• Known AF -4 patients • New AF -3 patients CHADSVASC >3 AF forms were not filled in
	• Patients not on Anticoagulation -7 (14%) • 3 patients had CI -small SDH, PR bleed, major haematuria • 2 Patients -mentioned about anticoagulation to consider in post take ward round but no further f/u • 2 patients -AF issue was not discussed

NICE Guidance 2014 [1]

i. In patients with new onset AF who are receiving no, or sub therapeutic anticoagulation, offer Heparin at initial presentation and continue until appropriate anti thrombotic therapy has started based on risk stratification.
ii. Anticoagulation may be with apixaban, dabigatran, etexilate, rivaroxaban or a vitamin K antagonist.
iii. Do not offer aspirin monotherapy solely for stroke prevention to people with atrial fibrillation.
iv. Anticoagulation should be offered to people with a CHA2DS2VASc score of 2 or more, and considered for men with a CHA2DS2VASc score of 1, taking bleeding risk into account.
v. Dual antiplatelet therapy (with aspirin and clopidogrel) might be considered if anticoagulation is contraindicated or not tolerated and the person has a CHA2DS2VASc score of 2 or above.

Aim

A Complete Audit was performed at UHNM between 2015 & 2017 to review patients admitted to UHNM (County hospital and Royal Stoke Hospital) with AF (New /Old).

i. To check whether these patients were on appropriate anticoagulation or not.
ii. If not on anticoagulation whether assessed for anticoagulation by using CHA2DS2-VASc & HASBLED score.
iii. Right Anti-Coagulation choice for AF patients by using SAMe-TT2R2 score.

Methods

i. Prospective Audit.
ii. 50 Patients were analysed in initial audit & 50 in re-audit (Total 100 Patients).
iii. Mixture of patients on medical wards and acute medical unit.
iv. Specific Audit Performa was designed based upon NICE Guidelines.
v. CHA2DS2-VASc score, HASBLED Score & SAMe-TT2R2 score was used.

Results

I Initial Audit Results (50 Patients)

i. 34 were male and 16 were female.
ii. 30 were on anticoagulation (60%).
iii. 18 were on warfarin & 12 on NOACs.
iv. 20 were not on anticoagulation (40 %).
v. Only 2 were assessed for anticoagulation.
vi. Average CHAD2-VASc score for those patients was 4.

II Recommendations

i. A new AF Performa devised to be used at the time of initial clerking.
ii. All eligible patients to be started on anticoagulation.
iii. If known AF and not on anti-coagulation, need to document the reason clearly in notes.
iv. Clear documentation of discussion with the patient regarding anticoagulation.
v. GP should be informed about anti-coagulation decision via discharge letter.
vi. Re-Audit in 6 months to complete the audit cycle.

III Re-Audit Results (50 Patients)

i. 23 were male and 27 were female.
ii. 43 were on anticoagulation (86%) (4 were assessed and started on anticoagulation during current admission).
iii. 17 were on warfarin & 25 on NOACs.
iv. Patients not on Anticoagulation - 7 (14%).
    a. 3 patients had CI - small SDH, PR bleed, major Hematuria.
    b. 2 patients - mentioned about anticoagulation to consider in PTWR but no further f/u.
    c. 2 patients - no mention of AF at all.
v. Average CHAD2-VASc score for those patients was 4.

Conclusion

This audit has demonstrated significant improvement in overall anticoagulation rates in suitable patients which have helped in improving patient safety.

However there still needs to be further awareness among doctors which can be achieved through:

i. Teaching sessions;
ii. Grand round presentation;
iii. Posters in wards.

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